

REMARKS

The present Amendment and Response is intended to be fully responsive to all points of objections and/or rejections raised by the Examiner and is believed to place the application in condition for allowance. Applicants assert that the present invention is new, non-obvious and useful. Prompt reconsideration and allowance of the claims are respectfully requested.

Status of the Claims

Claims 1-9 have been withdrawn.

Claims 10-16 are currently pending.

Claim 10 has been amended to correct a typographic error.

Remarks to Claim Objections

The December 24, 2009 Office Action objected claim 10 for a typographic error, indicating that the word “extend” shall be “extent”.

Applicants have amended claim 10 to correct the above typographic error. More specifically, Applicants have replaced the word “extend” with the word “extent”. In view of this, Applicants respectfully request that objection of claim 10 be withdrawn.

Remarks to Claim Rejections

Claim Rejections - 35 USC §103

The December 24, 2009 Office Action rejected claims 10-15 as being unpatentable under 35 U.S.C. §103(a) over Yau et al. (Applied Physics Letters 57 (1990), No 27, pp.2913-2915, “Yau”) in view of Asahino et al. (Physical Review Letters 86 (2001) No 19, pp.4334-4337, “Asahino”) and further in view of Jersch et al. (Applied Physics A 64 (1997) pp. 29-32, “Jersch”).

Applicants respectfully disagree.

It is admitted, in the Office Action, that Yau does not teach using an AFM probe tip in the process of patterning a substrate, which is recited in independent claim 10. In addition, Applicants would like to respectfully point out that neither Asahino nor Jersch cure the above deficiency of Yau, contrary to what is alleged by the Office Action.

For example, Asahino describes using STM and AFM simultaneously to obtain image of surface topography of TiO₂, which is clearly different from the process of patterning a structure on a substrate. Applicants respectfully submit that Asahino does not teach, suggest, or even imply patterning a structure on a substrate using AFM. Moreover, claim 10 of the present invention recites, among other distinct features and elements, using the tip of AFM to intensify an electromagnetic near-field to such an extent that the vapour is decomposed. Applicants respectfully submit that all the prior art references of record, in particular Yau, Asahino, and Jersch, alone or in combination, does not teach, suggest, or even imply the above distinctive features and elements of present invention.

Furthermore, since Asahino describes a process of obtaining surface topography, different from a process of patterning a substrate that is allegedly taught by Yau, the Office Action has not provided any factual evidence, together with scientific background, to support the allegation that “it would have been obvious ... to use an AFM/STM system ... in Yau et al.”, and such evidence and background are respectfully requested.

In view of the above, it is respectfully submitted that claim 10 is not obvious in view of prior art references of record, alone or in combinations, and is patentable.

Claims 11-15 depend from independent claim 10 and include all the distinctive features of claim 10, in addition to other distinguishing features and elements. Claims 11-15 are patentable at least for the same reasons as discussed above with regard to claim 10.

The December 24, 2009 Office Action rejected claim 16 as being unpatentable under 35 U.S.C. §103(a) over Yau, in view of Asahino, in view of Jersch, and further in view of Takahashi et al. (Ultramicroscopy 82 (2000), pp. 63-68, “Takahashi”).

Applicants respectfully disagree.

Claim 16 depends from claim 10 and includes all the distinct elements of claim 10 as described above, as well as other distinctive features and/or elements. Thus, claim 16 is patentable at least for the same reasons as discussed above with regard to claim 10.

In view of above remarks, Applicants respectfully request that rejections of claims 10-16 made under 35 U.S.C. §103(a) be withdrawn.

Conclusion

In view of the preceding remarks, Applicants respectfully submit that all pending claims are now in condition for allowance. Favorable reconsideration and allowance of the claims are respectfully requested.

No fees are believed to be due in connection with this paper. However, if there is any such fee due, please charge any such fee to the deposit account No. 09-0458.

Respectfully submitted,

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Dated: March 12, 2010

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